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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,850	08/11/2000	Byung-Jin Kim	0465-1915PUS1	8507
2292 7590 07/13/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
ATALA, JAMIE JO				
ART UNIT		PAPER NUMBER		
2621				
NOTIFICATION DATE		DELIVERY MODE		
07/13/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

09/635,850

Applicant(s)

KIM ET AL.

Examiner

JAMIE JO VENT ATALA

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/30/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 24-28, 30, 33-36, 38, 42-45, 47, 50, 51 and 53-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 24-28, 30, 33-36, 38, 42-45, 47, 50, 51 and 53-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 11, 2009 has been entered.

Response to Arguments

1. Applicant's arguments with respect to claim 20 have been considered but are moot in view of the new ground(s) of rejection over Na et al (US 6,504,996) in view of Okada et al (US 6,266,483) in view of Takehiko et al (US 6,741,795). As taught by Okada et al the teaches the reading an MPEG transport stream directly from a recording medium as disclosed in Column 4 Lines 64+ through Column 5 Lines 1-48 wherein the MPEG transport stream is read from the external apparatus/recording medium.
2. Claims 20, 24-28, 30, 33-36, 38, 42-45, 47, 50, 51, and 53-60 are pending. Claims 21, 22, 23, 29, 31-32, 37, 39-41, 46 48-49 and 52 have been cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20, 24-28, 30, 33-36, 38, 42-45, 47, 50, 51, 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na et al (US 6,504,996) in view of Okada et al (US 6,266,483) in view of Takehiko et al (US 6,741,795).

[claim 20]

In regard to Claim 20, Na et al discloses a method of generating a transport stream, comprising:

- reading an MPEG stream recorded in a recording medium (Figure 4 shows a reproducing means of a DVD as described in Column 4 Lines 11-51 further describe the MPEG stream being read from the recording medium); however, fails to disclose
 - reading an MPEG transport stream directly from a recording medium, the MPEG transport stream including a series of transport packet
 - generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet
 - inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream
 - transferring the MPEG transport stream including the inserted program managing information through the digital interface.

Okada et al teaches an information recording medium and further comprising:

- o reading an MPEG transport stream directly from a recording medium, the MPEG transport stream including a series of transport packet (Column 4 Lines 64+ through Column 5 Lines 1-48 describes the reading of the MPEG transport stream directly from the external apparatus/recording medium).

It is taught by Okada et al teaches information recording medium that reads a MPEG transport stream directly from the recording medium to allow for processing of the video stream directly from the recording medium. Therefore, it would have been obvious to use the reading of the MPEG stream, as disclosed by Na et al, and further incorporate a system that indicates reading a MPEG transport stream directly from a recording medium, as taught by Okada et al, in order to provide a seamless method for reading from the recording medium.

Takehiko et al discloses a system for reading and processing MPEG transport streams (Figure 1) further comprising:

- o generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet (Column 10 Lines 65-67 through Column 11 Lines 1-8 describes the discontinuity of the MPEG transport stream)
- o inserting the generated program managing information a connection point in the read MPEG transport stream when a

discontinuity occurs in the MPEG transport stream (Column 11 Lines 10-12 describes the inserting of a discontinuity flag for reading of the MPEG transport stream);

- transferring the MPEG transport stream including the inserted program managing information through the digital interface (Column 11 Lines 13-46 describes the transferring of the MPEG transport stream through the digital interface.

It is taught by Takehiko et al to insert a discontinuity flag into the isochronous packet to provide reproduction operation that is seamless moving image is reproduced (Column 7 Lines 1-10). Therefore, it would have been obvious to use the reading of the MPEG stream, as disclosed by Na et al in view of Okada et al, and further incorporate a system that indicates and inserts information regarding the discontinuity of the MPEG transport stream, as taught by Takehiko et al, in order to provide a seamless moving image when the MPEG stream is reproduced.

[claim 24]

In regard to Claim 24, Na et al discloses a method of claim 21, wherein the generated transport packet is inserted between two of the transport packets existing in the read MPEG transport stream (Column 8 Lines 17-44 describes the inserting between transport packets).

[claim 25]

In regard to Claim 25, Na et al discloses a method of claim 20, wherein in the reproducing step, the recording medium is an optical disc (Figure 4 shows an optical disk, DVD).

[claim 26]

In regard to Claim 26, Na et al discloses a method of claim 20, wherein in the reproducing step, the MPEG transport stream is an MPEG-2 transport stream (Column 6 Lines 17-21 describes the MPEG-2 transport stream that is used for reproducing of the data).

[claim 27]

In regard to Claim 27, Na et al discloses a method of claim 21, wherein the inserting step is performed within an optical disc player (Figure 2 shows an optical disc player as described in Column 4 Lines 10-16).

[claims 28]

In regard to Claim 28 Na et al discloses a method of claim 27, wherein the reproducing step is performed by the optical disc player (Figure 2 shows an optical disc player as described in Column 4 Lines 10-16).

[claim 30]

In regard to Claim 30, Na et al discloses a method of generating a transport stream further comprising

- reading an MPEG stream recorded in a recording medium (Figure 4 shows a reproducing means of a DVD as described in Column 4 Lines 11-

51 further describe the MPEG stream being read from the recording medium); however, fails to disclose

- reading an MPEG transport stream directly from a recording medium, the MPEG transport stream including a series of transport packet
- generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet
- inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream
- transferring the MPEG transport stream including the inserted program managing information through the digital interface.

Okada et al teaches an information recording medium and further comprising:

- reading an MPEG transport stream directly from a recording medium, the MPEG transport stream including a series of transport packet (Column 4 Lines 64+ through Column 5 Lines 1-48 describes the reading of the MPEG transport stream directly from the external apparatus/recording medium).

It is taught by Okada et al teaches information recording medium that reads a MPEG transport stream directly from the recording medium to allow for processing of the video

stream directly from the recording medium. Therefore, it would have been obvious to use the reading of the MPEG stream, as disclosed by Na et al, and further incorporate a system that indicates reading a MPEG transport stream directly from a recording medium, as taught by Okada et al, in order to provide a seamless method for reading from the recording medium.

Takehiko et al discloses a system for reading and processing MPEG transport streams (Figure 1) further comprising:

- generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet (Column 10 Lines 65-67 through Column 11 Lines 1-8 describes the discontinuity of the MPEG transport stream)
- inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream (Column 11 Lines 10-12 describes the inserting of a discontinuity flag for reading of the MPEG transport stream);
- transferring the MPEG transport stream including the inserted program managing information through the digital interface (Column 11 Lines 13-46 describes the transferring of the MPEG transport stream through the digital interface.

It is taught by Takehiko et al to insert a discontinuity flag into the isochronous packet to provide reproduction operation that is seamless moving image is reproduced (Column 7 Lines 1-10). Therefore, it would have been obvious to use the reading of the MPEG stream, as disclosed by Na et al, and further incorporate a system that indicates and inserts information regarding the discontinuity of the MPEG transport stream, as taught by Takehiko et al, in order to provide a seamless moving image when the MPEG stream is reproduced.

[claim 33]

In regard to Claim 33, Na et al discloses a method of claim 31, wherein the generated transport packet is inserted between two points in the reproduced MPEG transport stream where there are no audio/video transport packets between the two points (Column 4 Lines 23-42 describes the inserting of two points that contain no audio/video packets).

[claim 34]

In regard to Claim 34, the claim limitations have been met in Claim 27.

[claim 35]

In regard to Claim 35, the claim limitations have been met in Claim 27.

[claim 36]

In regard to Claim 36, the claim limitations have been met in Claim 27.

[claim 38]

In regard to Claim 38, the claim limitations have been met in Claim 20.

[claim 42]

In regard to Claim 42, the claim limitations have been met in Claim 24.

[claim 43]

In regard to Claim 43, the claim limitations have been met in Claim 25.

[claim 44]

In regard to Claim 44, the claim limitations have been met in Claim 26.

[claim 45]

In regard to Claim 45, the claim limitations have been met in Claim 27.

[claim 47]

In regard to Claim 47, the claim limitations have been met in Claim 20.

[claim 50]

In regard to Claim 50, the claim limitations have been met in Claim 20.

[claim 51]

In regard to Claim 51, the claim limitations have been met in Claim 25.

[claim 53]

In regard to Claim 53, the claim limitations have been met in Claim 20.

[claim 54]

In regard to Claim 54, the claim limitations have been met in Claim 30.

4. Claims 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na et al (US 6,504,996) in view of Okada et al (US 6,266,483) in view of Takehiko et al (US 6,741,795) in further view of Slattery (US 6,064,676).

[claim 55]

In regard to Claims 55, Na et al in view of Takehiko et al discloses a method of claim 20; however fails to disclose:

- detecting a null time interval in the MPEG transport stream, said null time interval corresponding to said discontinuity, wherein the inserting step inserts the program managing information into the detected null time interval;
- wherein the inserting step inserts the program managing information into the detected null time interval.

Slattery et al discloses a system wherein information is inserted in the transport stream as seen in Figure 2. Additionally, as described in Column 5 Lines 28+ describes detecting a null time interval that provides the transport stream the ability to identify transport streams and thereby allows management information to be entered the transport stream. Therefore, it would be obvious to one of ordinary skill in the art to use the transport streams, as disclosed by Na et al and further incorporate a system wherein the null value is used to identify transport streams, as disclosed by Slattery et al.

[claim 56]

In regard to Claim 56, the claim limitations have been met in Claim 55.

[claim 57]

In regard to Claim 57, the claim limitations have been met in Claim 55.

[claim 58]

In regard to Claim 58, the claim limitations have been met in Claim 55.

[claim 59]

In regard to Claim 59, the claim limitations have been met in Claim 55.

[claim 60]

In regard to Claim 60, the claim limitations have been met in Claim 55.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Yamauchi et al (US 6,907,616).

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO ATALA whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMIE JO ATALA/
Examiner, Art Unit 2621